



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/642,702

08/18/2003

Vivek Jaiswal

P16507

4365

76/973

7590

03/18/2009

The Law Offices of Christopher K. Gagne

c/o CPA Global

B.O. Box 52050

Minneapolis, MN 55402

EXAMINER

PATEL, CHIRAG R

ART UNIT

PAPER NUMBER

2441

MAIL DATE

DELIVERY MODE

03/18/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/642,702

**Applicant(s)**

JAISWAL ET AL.

**Examiner**

CHIRAG R. PATEL

**Art Unit**

2441

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 11 December 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SE/US)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

***Response to Arguments***

Applicant's arguments with respect to claims 1-21 have been considered but are moot in view of the new ground(s) of rejection.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 4-12, and 19-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Paul et al. – hereinafter Paul (US 2004/0133677) in view of Daoud et al. – hereinafter Daoud (US 2002/0087694)/ Ejzak (US 2003/0027595).

As per claims 1 and 7, Paul discloses a method of communicating load, comprising:

determining a load on a first node; ([0075])

factoring the load into a session initiation protocol ([0035]; phrase "H.323 network" may refer to other multimedia conferencing protocols associated with voice, video, and/or data conferencing via a packet switched network) Q-value for the first node, ([0046]; Figure 4 item 408) transmitting the Q-value to a second node via one or more load brokers ,and ([0050]; Figure 6: item 602)

determining a domain load factor for a domain ([0045]; Figure 4: item 404) that comprises a plurality of SIP entities, (Figure 1: item 130) the domain load factor indicating domain load for the entire domain, ([0045]; Figure 4: item 404) the domain load factor to be shared with other domains and to be used with the Q-value to determine call routing. ([0046])

Paul fails to disclose where the Q-value is an integer value based on both (1) a contact priority and (2) a number of calls or an amount of information being processed for a call; and where each load broker is a back-to-back user agent.

Daoud discloses where the Q-value is an integer value (Figure 4: item 420) based on both (1) a contact priority and ([0043], [0047]; Figure 6: item 620)

(2) a number of calls or an amount of information being processed for a call.  
([0034]; current load)

Ejzak discloses a back-to-back user agent. ([0116]) At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify the teachings of Paul to disclose where the Q-value is an integer value based on both (1) a contact priority and (2) a number of calls or an amount of information being processed for a call; and where each load broker is a back-to-back user agent. The motivation would have been to efficiently route calls to a server based on service level information specific to the transaction (Daoud, [0012]) and to realize various features such as the availability of transcoders, conference bridges, announcement functions, or other media capabilities. (Ejzak [0116])

As per claim 4, Paul / Daoud / Ejzak disclose the method of claim 1. Paul discloses further comprising:

a third node requesting the Q-value for the first node from the second node; and the second node transmitting the Q-value for the first node to the third node. ([0055]; Figure 8)

As per claim 5, Paul / Daoud / Ejzak disclose the method of claim 4. Daoud discloses the method of claim 4, wherein the second node also transmits Q-values for a plurality of alternate nodes to the third node. ([0040])

As per claim 6, Paul / Daoud / Ejzak disclose the method of claim 5. Daoud discloses further comprising the third node utilizing the one of the first node and the alternate nodes having the lowest Q-value as an intermediate node. ([0040])

As per claim 8, Paul / Daoud / Ejzak disclose the article of manufacture of claim 7. Paul discloses further the article of manufacture of claim 7, wherein the instructions are to cause the processor to direct a transmitting node to transmit the load information for the first node and the for the second node in the session initiation protocol Q -value. ([0050])

As per claim 9, Paul / Daoud / Ejzak disclose the article of manufacturer of claim 8. Daoud discloses wherein the transmitting node is to transmit the information to the least loaded of the first node and the second node. ([0040])

As per claim 10, Paul / Daoud / Ejzak disclose the article of manufacturer of claim 7. Paul discloses wherein the instructions are to cause the information to be redirected from the first node to the second node when the second node becomes less loaded than the first node. ([0041])

As per claim 11, Paul / Daoud / Ejzak disclose the article of manufacture of claim 7. Daoud discloses wherein load is based on at least one metric including call capacity of the first and second nodes, processing capability of the first and second nodes, network bandwidth at the first and second nodes, and network availability of the first and second nodes. ([0045])

As per claim 12, Paul / Daoud / Ejzak disclose the article of manufacture of claim 11. Paul discloses wherein the metrics of the first and second nodes are weighted based on the capacity of the nodes for that metric. ([0045])

As per claim 19, Paul / Daoud / Ejzak disclose the same limitations as claim 1. Paul discloses further a data storage device to contain a cross reference to session

initiation protocol entities coupled to a network and a load factor associated with session initiation protocol entities; ([0039]; Figure 2: item 210)

a network adaptor coupled to the network; a processor coupled to the data storage device and the network adaptor; and([0039]; Figure 2: item 212)

a computer readable medium having stored thereon instructions which, when executed by the processor ([0042])

As per claim 20, Paul / Daoud / Ejzak disclose the location service of claim 19. Paul discloses further the location service of claim 19, wherein the processor is to retrieve the a respective load factor associated with at least one of the session initiation protocol entities when requested to do so by a requesting session initiation protocol entity and transmit that load information to the requesting session initiation protocol entity through the network adaptor. ([0040])

As per claim 21, Paul / Daoud / Ejzak disclose the location service of claim 20. Paul discloses wherein the respective load factor is transmitted as a factor in a Q – value. ([0040])

Claims 2-3 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Paul (US 2004/0133677) / Daoud (2002/0087694)/ Ejzak (US 2003/0027595) further in view of Swildens et al. – hereinafter Swildens (US 7,346,676)

As per claim 2, Paul / Daoud / Ejzak disclose the method of claim 1. Paul fails to disclose further comprising the first node subscribing to a load factor exchange service in a message transmitted to the second node. Swildens discloses further comprising the first node subscribing to a load factor exchange service in a message transmitted to the second node (Col 4 lines 19-31) At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify Paul to disclose the first node subscribing to a load factor exchange service in a message transmitted to the second node. The motivation for doing so would have been to provide a load balancing service that provides metrics in a reliable manner without a need for expensive and difficult to use hardware and / or software. (Col 2 lines 6-11)

As per claim 3, Paul / Daoud / Ejzak disclose the method of claim 2. Swildens discloses the method of claim 2, further comprising the second node confirming receipt the subscription in a message transmitted to the first node. (Col 12 lines 38-42)

As per claim 13, Paul / Daoud / Ejzak disclose the article of manufacture of claim 7. Swildens discloses further wherein the instructions are further to cause the processor to receive a subscription from the transmitting node and at least one second



transmitting node, (Col 4 lines 19-31) and wherein the load for at least one of the first node and the second node is caused to be transmitted to subscribing nodes upon request. (Col 2 lines 6-11)

Claim 14-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Paul (US 2004/0133677) in view of Daoud (US 2002/0087694)

As per claim 14, Paul discloses a session initiation protocol device, comprising:  
a network adaptor coupled to a network; ([0039]; Figure 2: item 212)  
a session initiation protocol load module to receive session initiation protocol ([0035]; phrase "H.323 network" may refer to other multimedia conferencing protocols associated with voice, video, and/or data conferencing via a packet switched network)  
load information from session initiation protocol entities on the network through the network adaptor, ([0040]; Figure 3: item 302) wherein the load information is factored into a session initiation protocol Q-value, ([0046]; Figure 4 item 408)  
and a calculation module ([to provide load information for at least one of the session initiation protocol entities to a querying entity through the network adaptor ([0040])

the Q-value and a domain load factor ([0045]; Figure 404) both to be used to determine call routing, ([0046]) the domain load factor being determined for a domain that comprises a plurality of session initiation protocol entities, (Figure 1: item 130) the

domain load factor indicating domain load for the entire domain, the domain load factor to be shared with other domains ([0046])

Paul fails to disclose where the Q- value is an integer value ([0047], Figure 4: item 420) based on both (1) a contact priority and (2) a number of calls or an amount of information being processed for a call. Daoud discloses where the Q- value is an integer value based on both (1) a contact priority and ([0043], [0047]; Figure 6: item 620) (2) a number of calls or an amount of information being processed for a call. ([0034]; current load)

As per claim 15, Paul / Daoud disclose the session initiation protocol device of claim 14, and Paul discloses wherein the calculation module is furthermore to provide loads for a plurality of session initiation protocol entities to the querying entity. ([0050]; Figure 6: item 602)

As per claim 16, Paul / Daoud disclose the session initiation protocol device of claim 14 and Paul discloses wherein the load information for the session initiation protocol entities is based on at least one metric including call capacity, processing capability, network bandwidth, and network availability. ([0045])

As per claim 17, Paul / Daoud disclose the networked system of claim 14, and Paul discloses wherein the metrics of the entities are weighted based on their capacity for that metric. ([0045])

As per claim 18, Paul / Daoud disclose the networked system of claim 14, and Paul discloses wherein the load of the session initiation protocol entity is transmitted to the querying entity as a factor in a Q-value. ([0040])

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chirag R Patel whose telephone number is (571)272-7966. The examiner can normally be reached on Monday to Friday from 8:00AM to

4:30PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rupal Dharia, can be reached on (571)272-3880.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pairedirect.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll free).

/C. R. P./  
Examiner, Art Unit 2441

/Larry D Donaghue/  
Primary Examiner, Art Unit 2454